



LIFE nature projects - a tool for implementing environmental policies

*Bent Jepsen, Nature/Biodiversity
Coordinator at the LIFE External
Monitoring Team Astrale GEIE*





Introduction

- Presentation of Topic – how did we arrive at it?
- => The wish to focus on practical application!
- Rearing and releasing fish species and building fish passes and other re-connecting structures: best available techniques and guidelines to ensure effective and efficient investments
- Presentation of the Host- Wildlife Estonia
- Presentation Astrale – the external monitoring team for LIFE
- Presentation speaker –LIFE NAT/BIO coordinator, background hydrobiology.



The aim of LIFE projects

- The instrument for implementation of the EU environmental policies - *LIFE is the EU's funding instrument for the environment and climate action. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value*
- Demonstration of best practises
- Transfer of results
- Replication



What policies and datasets are relevant for riverine species?

- The EU habitats directive
- The EU biodiversity strategy 2020
- The EU Water Framework Directive
- The IUCN red lists (European Freshwater Fishes, 2011 Freshwater Molluscs, 2011)
- International conventions (Bern, UN Water Convention, Ramsar, Helcom, CBD)
- *For simplicity I will focus on the EU directives and policies and IUCN*



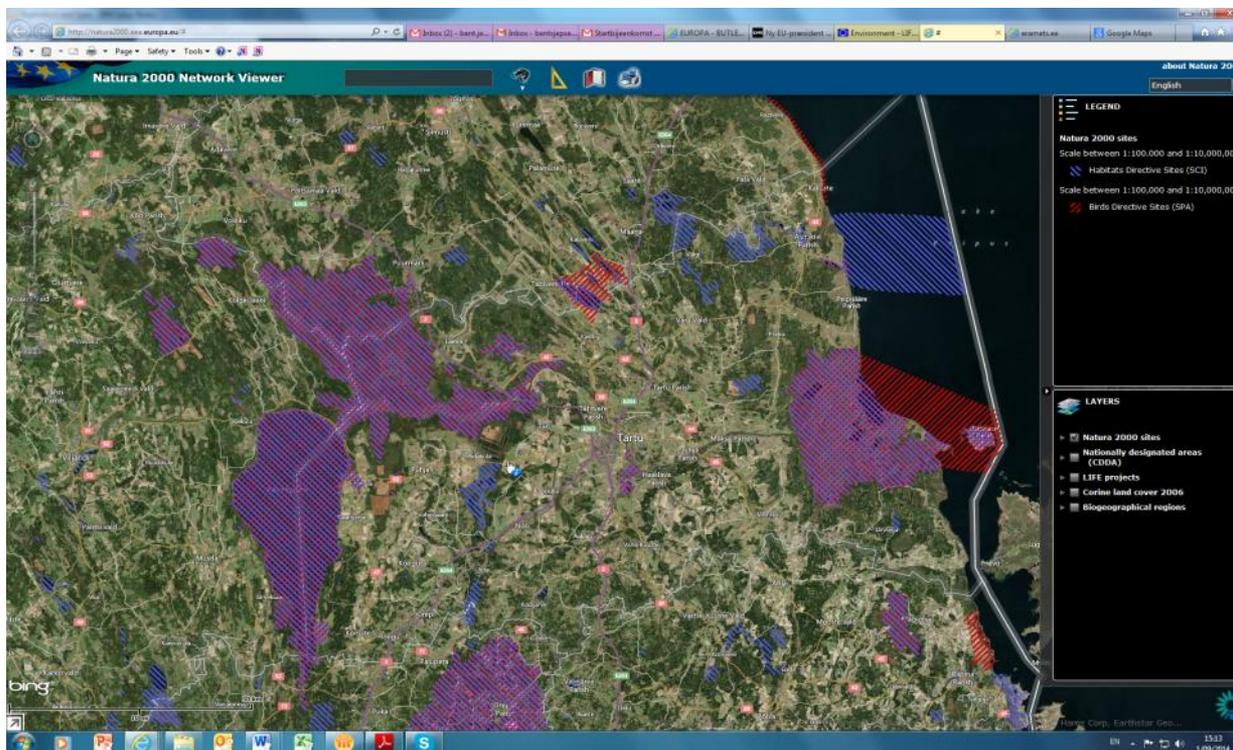
The EU habitats directive

- Annex I habitats
- Annex II species:
 - 65 fish species in Annex II,
 - 9 fish species in annex IV
- Designating sites of Community interest
- Setting conservation objectives for ensuring maintaining or reaching favourable conservation status of habitats and species



The EU habitats directive

Natura 2000 – f.ex the areas where Happyfish worked (map Natura viewer)





The EU habitats directive

- ➔ **Managing and protecting Natura 2000 sites**
- ➔ site-level conservation objectives –Member States shall establish conservation objectives and measures at site level for all SACs
- ➔ maximise the contribution of the sites to achieving FCS at the national, biogeographical or European level
- ➔ Defining **Conservation measures**: the actual mechanisms and actions to be put in place for a Natura 2000 site with the aim of achieving the site's conservation objectives
- ➔ establishing priorities **in the light of the importance** of the sites
- ➔ Expert knowledge has **a very important role to play** in setting and implementing objectives for the fish species, both at national and site level!



The EU habitats directive

→ Article 17 reports
(<http://bd.eionet.europa.eu/article17/reports2012/>)

→ *Aspius aspius*

Period... 2007-2012 Group... Fish Name... *Aspius aspius* Bio-region... Boreal Filter

View data sheet info Audit trail Map

Note: Rows in italic shows data not taken into account when performing the assessments (marginal presence, occasional, extinct prior HD, information, etc)

Legend: FV Favourable XX Unknown U1 Unfavourable-Inadequate U2 Unfavourable-Bad

Current selection: 2007-2012, Fish, *Aspius aspius*, Boreal. Annexes II, V. [Show all Fish](#)

Treated data from Member States reports

MS	Range (km ²)				Population				Habitat for the species (km ²)					Future prosp.	Overall assessment				Areas from gridded maps(km ²)			
	Area	% MS	Trend	Ref.	Size&Unit	% MS	Trend	Ref.	Area	% MS	Qual.	Trend	Suitable		Curr. CS	Qualifier	Prev. CS	Nat. of ch.	Range	% MS	Distrib.	% M
EE	13499	8.6	0	≈13499	N/A N/A	0	0	≈	1900	42.4	m	0	N/A	N/A	U1	=	U1	nc	13300	7.90	9800	8.4
FI	23800	15.2	0	≈23800	N/A N/A	0	+	≈	1924	42.9	g	+	0	N/A	FV		FV		23700	14	11500	9.8
LT	64700	41.2	0	≈64700	32000 - 38000 indiv.	26.3	0	≈32000	166	3.7	g	0	N/A	N/A	FV		FV		72100	42.60	70400	60.
LV	33600	21.4	0	33600	98000 - 98000 indiv.	73.7	0	98000	490	10.9	x	0	490	N/A	FV		FV		39100	23.10	18900	16.
SE	21300	13.6	0	21300	N/A N/A	0	+	N/A	0.05	0	g	+	0.05	N/A	U1	+	U1	a	21200	12.50	6600	5.6

Automatic Assessments Show

EU Biogeographical assessment and proposed corrections



Prioritised Action Frameworks- PAFs

- Aim at encouraging better integration of funds and to promote more strategic planning of investments in Natura 2000.
- PAFs are foreseen under Article 8 of the Habitats Directive.
- PAFs will define the funding needs and priorities for Natura 2000 at a national or regional level
- PAFs will facilitate integration of funding needs into the forthcoming operational programmes for the different EU funding instruments.
- First round for Member States by the end of 2012.



EU biodiversity strategy to 2020

- **TARGET 1: FULLY IMPLEMENT THE BIRDS AND HABITATS DIRECTIVES**
- *To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments: (i) 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and (ii) 50% more species assessments under the Birds Directive show a secure or improved status.*
- Action 1: Complete the establishment of the Natura 2000 network and ensure good management
- Action 2: Ensure adequate financing of Natura 2000 sites
- Action 3: Increase stakeholder awareness and involvement and improve enforcement
- Action 4: Improve and streamline monitoring and reporting



EU biodiversity strategy to 2020

- ➔ **TARGET 2: MAINTAIN AND RESTORE ECOSYSTEMS AND THEIR SERVICES**
- ➔ *By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15 % of degraded ecosystems.*
- Action 5: Improve knowledge of ecosystems and their services in the EU
- Action 6: Set priorities to restore and promote the use of green infrastructure
- Action 7: Ensure no net loss of biodiversity and ecosystem services



EU biodiversity strategy to 2020

→ **TARGET 5: COMBAT INVASIVE ALIEN SPECIES**

- *By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.*

Action 15: Strengthen the EU Plant and Animal Health Regimes

Action 16: Establish a dedicated instrument on Invasive Alien Species



The EU Water Framework directive

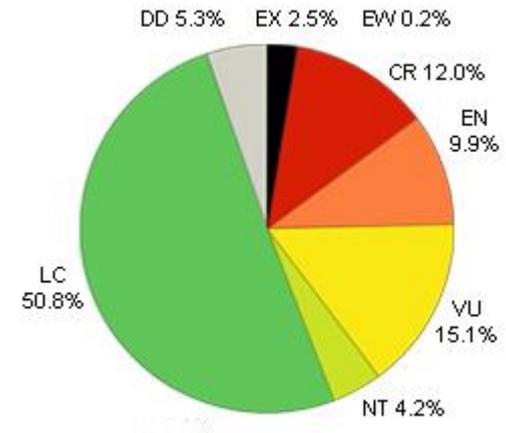
- Key objective of the WFD is to achieve good status for all water bodies by 2015 ("ecological status" and "chemical status")
- Key tools for the implementation of the WFD are the River Basin Management Plans and the accompanying Programme of Measures
- Important elements:
 - *Morphological condition of rivers*
 - *Hydrological conditions*
 - *Ensuring continuity*



IUCN red lists

Overview of level of threats to species:

Fish: 37% of Europe's freshwater fishes are threatened at a continental scale. A further 4% of freshwater fishes are considered Near Threatened. This is one of the highest threat levels of any major taxonomic group assessed to date for Europe. The conservation status of Europe's eight sturgeon species is particularly worrying: all but one are Critically Endangered.





IUCN red lists

Threats:

- Pollution (domestic, industrial and agricultural)
- Habitat loss due to over-abstraction of water.
- Introduction of alien species,
- Overfishing (particularly in the larger rivers of Eastern Europe)
- A massive increase in the construction of dams, blocking migration and altering stream habitats.



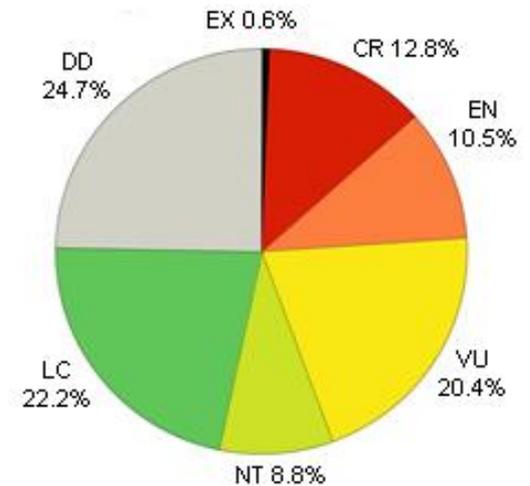
IUCN red lists

Status:

- 44% of freshwater molluscs are threatened in Europe.
- A further 9% of freshwater molluscs are considered Near Threatened.

Threats:

- Pollution (domestic, industrial and agricultural).
- Habitat loss due to over-abstraction of water.





What are LIFE projects targeting up to now?

River restoration in a broad sense.... 359 projects

Fish 136 projects

The frequency with which species are targeted varies:

- 15 fish, number of projects very varying, highest *Cottus gobio* (least concern) targeted by 46
- 3 molluscs, highest *Margaritifera margaritifera* (endangered) targeted by 27 projects





Needs for future action?

- The species targeted
- The species NOT targeted...
- Species action plans
- Your experience?



The priorities of the LIFE program

- Offering action grants for project implementation:
- Priorities defined in:
- Multi Annual Work Program
- The 2014 call for proposals
- A new project type: Integrated projects



Multi Annual Work Program- Nature

- Target 1 of the Biodiversity Strategy to 2020 to fully implement the Birds and Habitats Directives priority given to projects aiming at:
- 1. improving the conservation status of habitat types or species of Community Interest, targeting the **Natura 2000 sites** proposed or designated for these habitat types or species.
- 2. improving the conservation status of habitat types in *Natura 2000* sites or species of Community Interest, provided, their **status is not “favourable/secure and not declining” or “unknown”** (Article 17)
- 3. implementing one or several **actions** foreseen in the relevant **Prioritised Action Framework (PAF)** or concrete actions identified recommended or agreed in the framework of the *Natura 2000* bio-geographical seminars.



Multi Annual Work Program- Nature

- Target 1 of the Biodiversity Strategy to 2020 to fully implement the Birds and Habitats Directives priority given to projects aiming at :
- 5. Projects for improving the conservation status of habitat types or species of Community Interest the actions of which correspond to the **actions** identified in the relevant national or EU-level species or habitat action plans
- 6. Projects targeting invasive alien species, where these are likely to deteriorate the conservation status of species or habitat types of Community Interest in support of the *Natura 2000* network.



Multi Annual Work Program- biodiversity

- implementation of Targets 2, 3, 4 and 5 of the Biodiversity Strategy to 2020 are given priority:
- 1. Projects aimed at implementing **Target 2** of the Biodiversity Strategy, through the integration of actions to maintain and enhance ecosystems and their services into the activities of the public or private sectors, by establishing Green as well as Blue Infrastructure and restoring degraded ecosystems.
- 2. Projects implementing actions targeting **Invasive Alien Species**
- a. preventing the introduction of invasive alien species, in particular by tackling pathways of unintentional introduction,
- b. establishing an early warning and rapid response system, and
- c. eradicating or controlling established invasive alien species on an appropriate spatial scale.)



Multi Annual Work Program- biodiversity

implementation of Targets 2, 3, 4 and 5 of the Biodiversity Strategy to 2020 are given priority:

3. Projects targeting **threatened species** that are not included in the annexes of the Habitats Directive but that have a status of "**endangered**" or **worse** in the European Red Lists

5. Pilot or demonstration projects testing and then implementing **Green Infrastructure actions** ("blue" if aquatic ecosystems are concerned) focusing on:

c. cost-efficient technologies and methods that minimise the impact of existing energy and transport infrastructures on biodiversity by strengthening the functionality of spatially linked ecosystems.

d. Species re-introduction and other conservation introductions/translocations (only when meeting a number of conditions, including following the RSG_ISSG-Reintroduction-Guidelines)



Multi Annual Work Program- Water

- 3. Projects to allow the achievement of WFD objectives by **addressing hydro morphological pressures** identified in River Basin Management Plans (RBMPs) and originating from land use or in-river use,
- 6. Projects **re-naturalising** river, lake, estuary and coastal **morphology** and/or **re-creating associated habitats** including flood- and marsh plains, to allow the achievement of WFD and FD objectives.



Integrated projects

- **Scope of IPs for 2014-2017:** implementation of strategic environmental plans or strategies:
- - Nature IPs: implementation of Prioritised Action Frameworks (PAF)
- - Water IPs: implementation of River Basin Management Plans (RBMP) developed pursuant to the Water Framework Directive
- - for IPs dealing with the implementation of PAFs for Natura 2000, contribution to other targets of the EU biodiversity strategy and the achievement of 'good environmental status' under the Marine Strategy Framework Directive (MSFD), and for achieving Water Framework Directive objectives are welcomed, e.g. :
- evaluation, assessment and restoration of ecosystems and their services,
- reduction of the impact of fisheries and of other uses of marine and coastal natural resources on biodiversity,
- monitoring, prevention, eradication and control Invasive Alien Species



Integrated projects

- **Scope of IPs for 2014-2017:** implementation of strategic environmental plans or strategies:
- - IPs dealing with the implementation of River Basin Management Plans and their proposed actions such as targeted afforestation, wetland creation, re-instatement of floodplains – focus on contribution towards good status of inland waters, reduction to flood risk and support for improvements in terrestrial and aquatic biodiversity.
- Also, projects showing synergies with actions financed or submitted for financing under the LIFE sub-programme for Climate Action will be considered for higher scoring



IP Replicability and transferability is high priority

- the potential of the project to be replicated in other regions or member states during and after the implementation of the IP.
- Relies on clear plan at the outset, an evaluation strategy, a capacity building strategy and a legacy strategy that will reach critical mass during the project and/or in a short and medium term perspective after the end of the LIFE project.
- Not only transfer of knowledge and networking, but involves putting the techniques, methods or strategies developed or applied in the project into practice elsewhere.
- *Fx: For water IPs, having trialled a range of river restoration measures on a large scale in the IP, the most successful measures would be included into all RBMPs through the most relevant EU or national funds in other regions in the next planning*



What can we achieve with this platform meeting?

- Networking
- Exchange of experience – participants expectations.
- Fish passages - technical requirements & Legal regulations
- Monitoring fish restocking/reintroduction: approaches and methods
- Quality of the projects
- Stakeholder involvement and dissemination
- Cost effectiveness of the LIFE project actions
- Integrated projects as a tool for freshwater habitat and species conservation?
- Identify some of the groups which have been overlooked, or species not yet on IUCN European Red Lists: can LIFE offer help?